DOCUMENT RESUME

ED 465 541 SE 066 174

AUTHOR	Polman, Joseph L.
TITLE	Designing Project-Based Science: Connecting Learners through Guided Inquiry. Ways of Knowing in Science Series.
ISBN	ISBN-0-8077-3912-X
PUB DATE	2000-00-00
NOTE	220p.; Foreword by Roy Pea.
AVAILABLE FROM	Teachers College Press, P.O. Box 20, Williston, VT 05495 (paperbound: ISBN-0-8077-3912-X, $23.95; hardbound: ISBN-0-8077-3913-8, $50). Tel: 800-575-6566 (Toll Free); Web site: http://www.teacherscollegepress.com.
PUB TYPE	Books (010) -- Reports - Research (143)
EDRS PRICE	Document Not Available from EDRS.
DESCRIPTORS	Change Strategies; Computer Uses in Education; *Educational Policy; *Problem Based Learning; *Science Curriculum; *Science Instruction; Secondary Education; Sociocultural Patterns; *Teaching Methods

ABSTRACT

This interpretive case study of a teacher aims to provide an account of the difficulties and rewards of putting innovative teaching into practice. Detailed descriptions of classroom life are used to explore one teacher's attempts to make technology-enhanced, open-ended inquiry a successful mode of teaching science in the secondary school classroom. The book provides examples of what it means to "learn by doing," describing strategies that educators can use to move beyond traditional textbook approaches and interact with their students in ways that encourage them to become active science learners. The book explores the complexity of changing practice, detailing the conflicts that emerge when a teacher challenges traditional approaches to teaching and learning, and provides a historical and theoretical background for understanding current controversies in educational practices. By analyzing teacher and student work within the context of the entire school, the book demonstrates how the structural and cultural realities of the school itself complicate the enactment of pedagogical innovation in the classroom. The book is aimed at educators, school change advocates, administrators, and policy makers interested in understanding the social, cultural, and material constraints that affect the implementation of reform. (MM)

Reproductions supplied by EDRS are the best that can be made
from the original document.